

Remarks

Claims 1-27 are pending in this application, and stand rejected pursuant to the Examiner's Office Action dated 8/14/91. Applicants have amended Claim 27 in response thereto, and request the Examiner reconsider the rejection of these Claims 1-27. The following comments follow the order of the Examiner's comments, to facilitate issue resolution.

The Examiner rejected Claim 27 under 35 U.S.C. 101, stating that the claim was directed to non-statutory subject matter. The Examiner goes on to state that Claim 27 recites a computer program, and not a computer process. Applicants have amended Claim 27 to clearly show a computer program residing on a computer compatible medium is being claimed. Applicant's maintain that a computer program, residing on a computer compatible medium, is a tangible good, or article of manufacture. As such, this article of manufacture is statutory, per 35 U.S.C. 101. As was recently held by the 3rd Circuit Court of Appeals

'software refers to the medium that stores input and output data as well as computer programs.... Programs are codes prepared by a programmer that instruct the computer to perform certain functions. When the program is transposed onto a medium compatible with the computer's needs, it becomes software... That a computer program may be copy-rightable as intellectual property does not alter the fact that once in the form of a floppy disc or other medium, the program is tangible, moveable and available in the marketplace. The fact that some programs may be tailored for specific purposes need

not alter their status as "goods". Advent Systems Limited v. Unisys Corporation, 925 F.2d 670 (3rd Cir. 1991).

It is clear from the above discussion that as a computer program residing on a computer compatible medium is a good, it is similarly an article of manufacture which falls under the gamut of allowable subject matter under 35 U.S.C. 101.

The Examiner next rejected Claims 1-27 under 35 U.S.C. 103 as being unpatentable over Beck et al. The Examiner states that Beck teaches "interface object", "dynamically associating", and "based upon the data". The Examiner further states that the graphical representations of objects taught by Beck could be construed as interface objects, and that "dynamically associating" could be reasonably be interpreted as a mere frame response to a user selected object. Applicants show that Claim 1 would not be obvious in view of Beck as follows.

It is axiomatic that, in proceedings before the PTO, claims in an application are to be given their broadest reasonable interpretation consistent with the specification, and that claim language should be read in light of the specification as it would be interpreted by one of ordinary skill in the art. In re Sneed and Young, 218 USPQ 385 at 388 (Fed Cir 1983). Applicants assert that notwithstanding the broad claims interpretation being made by the Examiner, Beck fails to disclose the 'dynamic association ... based upon data within ... said interface objects' which is being claimed by Applicants, and which is in fact a key portion of the claimed invention. Beck fails to teach the use of data contained within an object to dynamically 'create a frame response to a user selected object'. If the Examiner

maintains his/her stated position, Applicants request the Examiner to explicitly show where Beck teaches using data within an object to dynamically generate a 'frame response to a user selected object'.

Rather, the Beck system, when triggered by a message transmission, displays representations of objects comprising a box with labels identifying the represented object (Beck Col. 3, lines 2-6). There is no suggestion or teaching in Beck of using data within the object itself to aid, assist, or be used in conjunction with the dynamic association of objects with the screen representation. If Beck has any dynamic association at all, it is the use of messages to invoke screen representations of objects. These Beck messages are not contained within the objects to be displayed by a screen representation. Rather, the messages are used to convey information between objects.

To reiterate, Applicants are claiming the use of data within the object to dynamically associate objects with frame presentations. This provides greater extendibility and flexibility in adding objects and corresponding screen representations for such objects, as the interface objects can be added or deleted to the system independently of one another. Recompilation of the menu tool is not necessary when adding or deleting objects. This flexibility simply does not exist in the teachings of Beck.

Claims 2-25 are similarly allowable, as they contain all the limitations of Claim 1 which has been shown to be allowable in view of Beck. However, notwithstanding the above, Applicants will further show how these claims are allowable in view of Beck.

The Examiner rejected Claim 2 in stating that Beck can reasonably be interpreted to teach the use of "attributes of

system resources". The Examiner has failed to show where Beck discusses or teaches representing attributes of system resources as claimed by Applicants. Beck's objects merely represent the resources themselves, and not particular attributes of system resources. Claim language should be read in light of the specification as it would be interpreted by one of ordinary skill in the art. In re Sneed and Young, Id. One of ordinary skill in the art would not equate system resources to mean attributes. System resources are generally known to mean such things as printers, communication ports, DASD, etc., whereas the attributes are known to those of ordinary skill in the art to refer to specific parameters for a given resource, such as the baud rate of a communication port. Beck's providing for object representations of resources in no way suggests the use of objects for attributes of system resources. Thus, Claim 2 has been improperly rejected, as a prima facie case for obviousness has not been made.

Next, the Examiner rejected Claim 3 in stating that Beck teaches the claimed feature of representation of hierarchical relationships. Applicants refer to the arguments made with respect to Claim 1 in rebuttal, and assert that Claim 3 has similarly been erroneously rejected.

The Examiner rejected Claim 4, for reasons given in Claim 1. Applicants maintain that Beck does not teach any type of dynamic association using hierarchical data stored within an object, as is being claimed by Applicant. Beck uses messages to trigger objects, and the methods have no hierarchical data, nor are they a part of the objects themselves. Thus, Claim 4 has been improperly rejected.

Next, the Examiner rejected Claim 5 in stating that Beck teaches the feature of means for managing of a screen

presentation'. Claim 5 has the limitation of managing screen presentation and a user interaction based upon data within ... interface objects. Beck's graphical representations are mere passive, output elements (Beck, Col. 4, lines 26-30). No use is made of data within the objects for assistance in the management of the screen presentation, as is being claimed by Applicants. Applicants claimed limitation of managing the screen presentation based upon data within an object is a key feature of Applicants' claimed invention. This feature provides for ease in system extensions or modifications to be made to the user interface by merely adding additional objects. Beck fails to even address the problem of flexibility in extending the user interface, much less teach a solution to the problem which Applicants have solved. Therefore, Claim 5 would not have been obvious in view of Beck, as there is no teaching or suggestion to modify the reference to achieve Applicants' claimed invention.

Applicants defer to the arguments regarding Claims 1 and 2 in response to the Examiner's rejection of Claim 6.

The Examiner rejected Claims 7 and 8 in stating that 'instance... of ... said system resources' is so broad as to reasonably be taught by Beck. Beck nowhere teaches or discloses the claimed limitation in Claim 7 of informing a user of an availability of a system resource instance. Claim 7 further contains all the limitations of Claim 2, which has been earlier shown to be patentable, as thus Claim 7 is likewise patentable. Nor does Beck teach allowing a user to select a system resource instance, as is claimed in Claim 8. The analysis for Claim 8 additionally follows from that of Claim 7 above, as Claim 8 is dependent upon Claim 7. Thus, Claim 8 is patentable in view of Beck.

The Examiner rejected Claims 9-20 in view of the broad interpretation of "interface objects". In general, there is no teaching or suggestion in Beck of any construed interface objects containing any data within the object itself, much less using such data to perform the functions claimed in Claims 9-20. Applicants will now address each of these claims in more specificity.

Applicants claim in Claim 9 'means for utilizing a current value of said... attribute of said ... system resource for a validation of a user response'. Beck does not teach system resources having attributes, or current values of attributes being used for validation of user responses. Therefore, the limitations claimed by Applicants are patentable in view of Beck. Further, Claim 9 includes all the limitations of Claim 2, which has been shown to be patentable. Therefore, Claim 9 was improperly rejected, and should be allowed.

Applicants claim, in Claim 10, a way of constructing a command based upon an input value and an option contained within an interface object. Beck does not disclose this claimed limitation. It has no teachings of building commands based upon an option contained within an interface object. The command line invocation of Beck in no way teaches or suggests the limitations being claimed by Applicants. Beck merely displays and executes a command, but does not construct a command. Claim 10 has been amended to clarify that this command construction occurs dynamically, as a result of user interaction and an interface object option. The command is not merely static in nature, as is the Beck command(s). Thus, amended Claim 10 is allowable in view of Beck.

The Examiner rejected Claim 11 by stating that Beck teaches means for executing command. Applicants maintain

that Claim 11 is allowable in view of Beck for the reason that Beck fails to teach the execution of a command which was dynamically generated based upon an option contained within an interface object. This claimed limitation of Claim 11 provides the flexible user interface being claimed by Applicants.

In response to the Claim 12 rejection, Applicants maintain that Claim 12 is likewise allowable for the reasons given above for Claims 10 and 11. Further, Applicants maintain that Beck does not teach logging commands for later execution. Beck teaches displaying a list of messages in progress. This is not what is being claimed by Applicants, who are claiming 'logging said command for later execution'. This logging is a deferral method, not a status indicating method of Beck. Thus, Claim 12 has been improperly rejected and is allowable in view of Beck.

Applicants traverse the rejection of Claims 13-17 for the reasons given in regards to Claim 1, upon which this claim is dependant upon.

Claim 18 includes the limitation of 'altering an object database from within the interface during a session of execution ... and ... reflecting said altered interface during said same session' and is nowhere taught or suggested by Beck. This is a unique capability of Applicants' claimed invention, where the underlying database can be modified in real time, without the need for system regeneration(see Specification, page 8, line 21 to page 9, line 6). Thus, Claim 18 was improperly rejected as there is no teaching or suggestion within Beck of this unique claimed feature.

Claim 19 includes the limitation of altering an interface object database by creating a new interface object. This is not the same or similar to the Beck teachings of

updating a visual display, which is not an object database. There is no connection between Beck's status information being displayed, and the ability to alter an underlying object database. Therefore, Claim 19 was improperly rejected and should be allowed.

Claim 20, includes the limitation of directly entering hierarchy of objects. There is no discussion, teaching, or suggestion of directly entering a hierarchical relationship of interface objects by Beck. Beck merely teaches a fixed hierarchy of classes, and the ability to suppress the display of intermediate messages. Therefore, Claim 20 was improperly rejected by the Examiner in view of Beck, and should be allowed.

Claim 21 was rejected by the Examiner as being obvious in view of Beck, and specifically at Col. 10, lines 1-6 of Beck. The Examiner states that Beck teaches means for displaying presentations by a plurality of graphical libraries. Applicants have analyzed the teachings pointed out by the Examiner in the Beck reference, and fail to see any teaching or suggestion for 'displaying said logical frame presentations by a plurality of graphical libraries', as is claimed by Applicants. This support for plural graphical libraries is another key feature of Applicants claimed invention, and allows for future applications to use graphical libraries which are supplied by the application, and bypass any existing graphical libraries predefined by the system. This additional degree of flexibility in the underlying system design is in no way taught or suggested by Beck. There is no teaching of a graphical library, nor is there a teaching a supporting a plurality of graphical libraries. The Examiner states that Beck's teaching of a message-set browser is a reasonable interpretation of graphical

libraries. The Examiner is apparently equating the use of multiple windows with multiple graphical libraries. As is known to those of ordinary skill in the art who would reasonable interpret the scope of the claimed element 'graphical libraries', this does not refer to the display of multiple windows, i.e. "libraries" does not means "windows". Thus, Claim 21 was improperly rejected by the Examiner, and is allowable in view of Beck.

In Claims 22 and 23, Applicants are claiming 'means, within said interface objects, for representing...'. Beck's graphical representations have no means to do anything. They are mere output representations, and contained no information within themselves, for representing items in a logical frame in a plurality of ways depending upon a graphical or linguistic context, as is claimed by Applicants. Claims 22 and 23 have been improperly rejected and should be allowed.

Claim 24 is traversed by the reasons given in overcoming the rejection of Claim 1.

Claim 25 includes the limitation of an access control policy. No access control policy is taught or suggested by Beck. Rather, Beck merely displays a list of commands for a user to invoke, and has no means for providing any access control policies on commands available for selection. Therefore, this Claim 25 was improperly rejected and should be allowed.

Claims 26 and 27 were rejected by the Examiner for reasons substantially the same as Claim 1, and Applicants rely on the arguments made with respect to Claim 1 to traverse this rejection.

In closing, it should be emphasized that the Beck graphical representations are mere passive output indicators and have no bearing or relationship to the interface objects

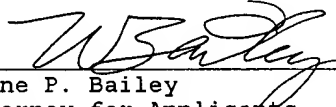
being claimed by Applicants. These interface objects have information contained within the objects themselves, and this information and objects are used to drive (i.e. is an active input to) a target system resource. As the functions have no bearing or relationship to one another, it would further not be obvious to modify the teachings of Beck to achieve Applicants' claimed invention.

For all the above reasons, Applicants request the Examiner to withdraw the rejection of, and allow, these Claims 1-27, as all basis for rejection have been overcome. Should the Examiner fail to withdraw the rejection of these Claims, Applicants' attorney requests that a telephone interview with the Examiner be granted. Such interview can be scheduled by contacting Applicants' attorney at the number listing below.

Respectfully Submitted,

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